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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/977,846 11/25/97 RYAN

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EXAMINER

TM02/0816

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ART UNIT

PAPER NUMBER

2161

DATE MAILED:

08/16/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No.

08/977,846

Applicant(s)

RYAN, JOHN O.

Examiner

Thomas A. Dixon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 33-59 is/are pending in the application.
- 4a) Of the above claim(s) 2-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,33-42,47-51,58-59 is/are rejected.
- 7) ☒ Claim(s) 43-46 and 52-57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 26.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. IDS paper number 27, submitted 8 June 2001 has been considered.

#### ***Specification***

2. The abstract of the disclosure is objected to because it is too long.

Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 49 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 49 recites the limitation "the speed producing device" in line 2. There is insufficient antecedent basis for this limitation in the claim. Examiner believes that applicant was referring to the "speech producing subsystem" of claim 1, line 11, and will be read as such.

#### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1,33-35,48-51,58-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagashima (GB 2 259 204 A).

As per Claim 1.

Nagashima ('204) discloses:

a tuner for receiving a broadcast signal, see figure 1 (1, 2);

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a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 1 (13, 14);

a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus, see figure 7;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 1 (12 and 15);

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see figure 1 (16).

As per Claim 33.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses the memory stores the entire database, see page 4, lines 8-15.

As per Claim 34.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see figure 1 (13,14).

As per Claim 35.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses the non-volatile memory is a magnetic disk, see figure 1 (14).

As per Claim 48.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses the tuner channel skips to tune to a particular transmitter, see figure 3 (S21).

As per Claim 49.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses an amplifier, see figure 1 (8).

As per Claim 50.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses means for connecting the receiving system to an automobile radio set, see page 2, line 24 – page 3, line 1.

As per Claim 51.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses a hierarchy for the database, see figure 8 and

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As per Claim 58.

Nagashima ('204) discloses:

receiving the information, see page 18, lines 2-9;

storing the received information in a database, see column 18, lines 9-18 ;

providing a set of menus describing the database, see figure 7 and page 10,  
lines 12-21;

accepting selections from the set of menus, see page 14, line 21 – page 15, line  
14;

providing the selected data in digital form, see page 18, lines 9-18; and

converting the selected data to an analog signal, see page 10, lines 4-11, and  
page 18, line 18 – page 19, line 1.

As per Claim 59.

Nagashima ('204) discloses all the limitations of claim 58.

Nagashima ('204) further discloses the received information is transmitted by a  
broadcast signal, see page 3, line 17 – page 4, line 7.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
Nagashima (GB 2 259 204 A) in view of Lovett ('477) in view of Rovira (WO 92/10040).

As per Claim 36.

Nagashima ('204) discloses all the limitations of claim 35.

Nagashima ('204) does not disclose the received audio data has been converted  
from analog form to digital form.

Lovett ('477) teaches that the data stored in analog or digital form, see column  
11, lines 60-67 and digital/analog conversion, which is simply the reverse of digital to  
analog conversion, see column 12, lines 40-45, are well known for the benefit of  
conversion of data before transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the  
time the invention was made to convert analog data to digital form as taught by Lovett  
( '477) before sending to the invention of Nagashima ('204) for the benefit of conversion  
of data before transmission to an audience.

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Lovett does not specifically teach transmission of digital signals.

Rovira ('040) teaches transmission of digital signals see page 9, lines 4-14, for the benefit of providing an audience of subscribers with digital content.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the invention of Nagashima ('204) to store data in either analog or digital form as taught by Lovett ('477) and convert the data as necessary to transmit the data as taught by Rovira ('040) in digital form to an audience of subscribers.

As per Claim 37.

Nagashima ('204) in view of Lovett ('477) further in view of Rovira ('040) discloses all the limitations of claim 36.

Nagashima ('204) does not disclose the received digital audio data is digitized and has been compressed.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to digitize and compress the data transmission for the benefit of increased speed of data transmission.

As per Claim 38.

Nagashima ('204) in view of Lovett ('477) further in view of Rovira ('040) discloses all the limitations of claim 36.

Nagashima ('204) does not disclose the received digital audio data is digitized and has been encrypted.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to digitize and encrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 39.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) further discloses the data is alphanumeric data, see figures 7 and 8 and page 9, lines 1-8

Nagashima ('204) does not disclose the received data has been converted from analog to digital form.

Lovett ('477) teaches that the data stored in analog or digital form, see column 11, lines 60-67 and digital/analog conversion, which is simply the reverse of digital to analog conversion, see column 12, lines 40-45, are well known for the benefit of conversion of data before transmission.

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert analog data to digital form as taught by Lovett ('477) before sending to the invention of Nagashima ('204) for the benefit of conversion of data before transmission to an audience.

Lovett does not specifically teach transmission of digital signals.

Rovira ('040) teaches transmission of digital signals see page 9, lines 4-14, for the benefit of providing an audience of subscribers with digital content.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the invention of Nagashima ('204) to store data in either analog or digital form as taught by Lovett ('477) and convert the data as necessary to transmit the data as taught by Rovira ('040) in digital form to an audience of subscribers.

As per Claim 40.

Nagashima ('204) in view of Lovett ('477) further in view of Rovira ('040) discloses all the limitations of claim 39.

Nagashima ('204) further discloses the data is converted to voice by a speech synthesizer, see figure 8 (TRAFFIC INFORMATION SPEECH SYNTHESIZER).

6. Claims 41, 42, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashima (GB 2 259 204 A) in view of Rovira (WO 92/10040).

As per Claim 41.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) does not disclose a decryptor for decrypting the data.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16 and further a decryptor for decrypting, see page 14, lines 7-12 for the benefit of reversing the encryption, compression and conversion of the broadcast data.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of reversing the encryption, compression and conversion of the broadcast data.

As per Claim 42.

Nagashima ('204) in view of Rovira ('040) discloses all the limitations of claim 41.

Nagashima ('204) does not disclose a decompression algorithm for decompressing the data.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16 and further a decompression, see page 14, lines 7-12 for the benefit of reversing the encryption, compression and conversion of the broadcast data.

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decompress the data transmission for the benefit of reversing the encryption, compression and conversion of the broadcast data.

As per Claim 47.

Nagashima ('204) discloses all the limitations of claim 1.

Nagashima ('204) does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Rovira ('040) teaches a rate synchronizer see figure 3 (33-1, and 33-2) for the benefit of correct recreation of the digital sound sent.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the invention of Nagashima ('204) to include the rate synchronizer taught by Rovira ('040) for the benefit of correct recreation of the digital sound sent.

### ***Allowable Subject Matter***

7. Claims 43-46, 52-57 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Prior art made of Record***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lockwood "FM Sidebands: Tuning in to Wall Street" is the closest non-patent literature, but does not disclose the invention as claimed.




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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Dixon whose telephone number is (703) 305-4645. The examiner can normally be reached on Monday - Friday 7 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (703) 305-9768. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

  
Thomas A. Dixon  
Examiner  
Art Unit 2161

August 14, 2001